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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PHILIPPE, GIMS S

ART UNIT

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2621

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/730,534	Applicant(s) WEISS ET AL.	
	Examiner Gims S. Philippe	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-36 is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/09/09</u> . | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. Applicant's amendment received on April 27, 2009 in which claims 1, 17, 27 and 29 were amended has been fully considered and entered, but the arguments are not deemed to be persuasive.

Response to Arguments

The applicant argues that independent claim 1 is amended to more speedily resolve prosecution of this matter. The applicant further notes that the combination of Nallur and Yonemitsu does not teach or suggest "using a reconstructed frame caching device, caching a reconstructed frame according to a set of criteria, the reconstructed frame comprising a decoded multimedia content."

The examiner respectfully disagrees. The amendment made to claim 1 does not change/modify or clarify any aspect of the claim. In fact, a frame caching device is expected should a step is to cache a reconstructed frame. The device is nothing more than a cache as suggested by Nallur in fig. 2, item 273 (paragraph [0031]). Further, in paragraph [0034], Nallur clearly discloses that retrieved streams as deposited in an output cache in storage device 273, transferred to DRAM 252, and then processed for playback under program control and in communication with decoder 223. To the examiner, the decoder being in communication with the playback processor is generating reconstructed frame. The data cached in storage device 273 and

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transferred to DRAM 252 are reconstructed data. In addition, the set of criteria are found in the program information 203. In other word, the limitations of claim 1 are met by the proposed combination of Nallur and Yonemitsu as previously noted in the last office action.

The applicant further argues that the cached stream is not taught as being cached "according to a set of criteria". The applicant further provides the definition of criteria in order to make specify that the claims limitations are not met.

The examiner respectfully disagrees. The applicant must demonstrate that the set of criteria are not conventional. The applicant noted that the examiner relied upon a single criterion of paragraph [0030] disclosed in Nallur. While the applicant may point out a single criterion noted in the last office action by the examiner, the examiner considers the limitations as being broadly claimed. In addition, a further reading of Nallur paragraph [0033] will show more than one criterion for caching the reconstructed/decoded frame. For example, paragraph [0033] discloses that "Retrieved streams are deposited in an output cache in a storage device 273, transferred to DRAM 252, and then processed for playback according to mechanisms that would be understood by those having ordinary skill in the art. To the examiner the mechanisms provide the criteria claimed by the applicant. In addition, the criteria may be the request for retrieval. Caching data according to a set of criteria is very broad.

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The applicant further argues that "... to scrub to a select frame in a GOP, wherein the selected frame is not an I-frame, a scrub tool may have to perform many processing intensive and time consuming..." The applicant further admits that Yonemitsu establishes the basis of the problem. The applicant further states that without Yonemitsu, the Examiner fails to establish a prima facie case, particularly for the claimed "decoding the predictive frame starting with the reconstructed frame".

The examiner respectfully disagrees. Prima facie is being established since the applicant admits that the combination of Nallur and Yonemitsu does address the scrubbing problem. Nallur in paragraph [0056], page 7, lines 2-15, clearly determines if the non-Intraframe has been decoded (i.e., a P-frame). In addition, trick mode is being performed while reverse playback are performed in paragraph [0058].

It is the examiner's belief that the applicant's amendment does not overcome the prior art of record. The rejection will be repeated below while correlating the newly added limitations.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 1-10, 13-15, 17-20 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nallur et al. (US Patent Application Publication no. 2008/0037957) in view of Yonemitsu et al. (US Patent no. 5,140,437).

Regarding claims 1 and 17, Nallur discloses in fig. 1 a computing device and method for processing input media in a computing device (See Abstract and paragraph [0014], lines 1-8), the method comprising caching a reconstructed frame according to a set of criteria (See paragraph [0030, lines 1-6, 27-33]; receiving a request to scrub to a predictive frame of input media (See [0031], lines 1-9); and responsive to receiving the request, decoding the predictive frame (See [0056], lines 1-7).

It is noted that while Nallur provides the request to scrub in [0056] and identifies the I frame from the MPEG-2 stream in [0050], it is silent about starting with the reconstructed frame as specified in the claims.

Yonemitsu discloses processing input media as requested including the steps of starting from with reconstructed frame (See Yonemitsu figs. 2-3, and col. 6, lines 14-28). The applicant should note that the Intraframe is the first and "reconstructed frame" where the scrubbing/playback will start.

Therefore, it is considered obvious that one skilled in the art at the time of the invention that one skilled in the art at the time of the invention would recognize the advantage of placing a request for scrubbing where such request would start with the reconstructed frame. The motivation for performing such a step is to be able to identify the Intraframe of each sequence to facilitate either forward or reverse playback as well

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as trick play (See Yonemitsu col. 2, lines 29-36). The applicant should note that the different criteria are disclosed in Nallur [0055], lines 1-5.

As per claims 2-3, 8, 10, 15, 18, 20 and 23-24, Nallur further suggest caching by a component in a media pipeline (See Nallur [0030, lines 27-42).

As per claims 7 and 22, most of the limitations of these claims have been noted in the above rejection of claim 1. In addition, Nallur further discloses the input media specifying the timeline of the latest reconstructed frame (See [0032]).

As per claims 4-6, Nallur further discloses caching wherein the caching is responsive to playback of the input media, and wherein the caching is responsive to detection of a reverse playback operation (See Nallur [0031]).

As per claims 9, 19 most of the limitations of these claims have been noted in the rejection of claims 1, 17. In addition, Nallur further discloses the criteria based on periodic time interval (See [0052]), decoded frame size and available system memory, requesting an application playback rate (See [0052]).

4. Claims 11-14, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nallur et al. (US Patent Application Publication no. 2008/0037957) in view of Yonemitsu et al. (US Patent no. 5,140,437) as applied to claims 1-10, 13-15, 17-

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20, 22-26 above, and further in view of Huntington et al. (US Patent Application Publication no. 2007/0011321 A1).

As per claims 11-14, 16 and 21, it is noted that the combination of Nallur and Yonemitsu is silent about determining that there is a cached reconstructed frame representing a complete decoded version of an inter-frame of the input media, the cached reconstructive frame being associated with a time less than or equal to a time t_{request} of the predictive frame; and wherein the cached reconstructed frame is the reconstructed frame.

However, Huntington determined that there is a cache and wherein the cached frame is being associated with a timing with respect to predictive frame as specified in the claims (See Huntington paragraphs [0178-0179]).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying Nallur and Yonemitsu proposed playback by incorporating Huntington's step of determining that there is a cached reconstructed frame representing a complete decoded version of an inter-frame of the input media, the cached reconstructive frame being associated with a time less than or equal to a time t_{request} of the predictive frame; and wherein the cached reconstructed frame is the reconstructed frame. The motivation for performing such a modification in Dixon is to avoid spurious timer alarms and also to allow a user to move, remove, or dock several windows as taught by Huntington.

5. Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 27-36 are allowed.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S. Philippe whose telephone number is (571) 272-7336. The examiner can normally be reached on M-F (10:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gims S Philippe
Primary Examiner
Art Unit 2621

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